COKE OVENS SECTION 114 REQUEST – ENCLOSURE 1
Risk and Technology Review:
40 CFR part 63, subpart CCCCC and subpart L

ENCLOSURE 1
Facility Questionnaire for Coke Oven Facilities

The purposes of this request for information include the following: (1) to collect data and other information from the coke manufacturing industry to update and expand the information requested in 2016 to support the residual risk and technology review (RTR) under Clean Air Act section 112(f)(2) and 112(d)(6) of the Maximum Achievable Control Technology standards for the National Air Emission Standards for Hazardous Air Pollutants (NESHAP) for Coke Ovens: Pushing, Quenching, and Battery Stacks (part 63, subpart CCCCC) and the NESHAP for Coke Oven Batteries (part 63, subpart L); (2) to inform the development of emissions standards for unregulated HAP pursuant to the CAA and the court decision *Louisiana Environmental Action Network, et al., Petitioners v. EPA* (2020), also known as the "LEAN Decision"; and (3) to inform potential revised or new emissions standards for co-located Coke Oven By-product Recovery (Chemical) Plants that are currently regulated by the National Emission Standard for Benzene Emissions from Coke By-Product Recovery Plants (part 61, subpart L).

Please provide the information requested in this questionnaire below using the Microsoft® Excel® spreadsheet provided. Electronic pdf and Microsoft Word® files are provided in this package that include all the questions and tables in this questionnaire for ease of reading or distributing. However, **PLEASE ONLY SUBMIT YOUR ANSWERS USING THE PROVIDED EXCEL® FILE** along with any attachments, as requested in this **Enclosure 1, Questionnaire**. Please add additional rows to the Excel® tables as needed to contain your responses. ***In some cases, answers provided by your company in 2016 are included in the Excel® file for you to update or confirm***. No change is considered a confirmation that the information is correct.

This **Enclosure 1** request for information is divided into **five** main parts (A, B, C, D and E) to be completed by each facility. The general outline of this **Enclosure 1** is the following:

Enclosure 1:

Where to Send Your Information

After you have completed and reviewed your Questionnaire (**Enclosure 1**) responses, separate the confidential business information (CBI) components from the nonconfidential components and return the completed Questionnaire response(s) within **65 days (9 weeks plus 2 days) from the date of EPA email with Coke Ovens section 114 request for information package**. Should you have any unexpected problems with these deadlines, please contact either Donna Lee Jones at the email address Jones.DonnaLee@epa.gov, or Chuck French at the email address French.Chuck@epa.gov as soon as you are aware of a potential delay.

Nonconfidential Data

Please submit your **nonconfidential** data (including questionnaire Excel® workbook, test reports, permits, associated information, etc.) in one of the ways listed below. In order to avoid duplicate data and to keep all data for a particular facility together, we request that you submit all of the data requested from your facility in the same way, if possible. To submit your data, you may choose any ONE of the procedures below, although submitting files by email is preferred:

(1) Preferred - Email an electronic copy of all **nonconfidential** requested files to **Coke.ICR2@rti.org** (please try to keep file sizes sent over email smaller than 10 MB). If assistance is needed with submitting large electronic files that exceed the file size limit for email attachments, please email **Coke.ICR2@rti.org** to request a file transfer link; or

(2) Alternative - Mail a CD, or DVD containing an electronic copy of all **nonconfidential** requested files to either of the two EPA addresses below (hard copies are permitted if that's the only possibility; otherwise, electronic is preferred):

Please use the address below for U.S. postal service **nonconfidential** mail:

Donna Lee Jones (Mail Code D243-02) **NONCONFIDENTIAL**
Metals and Inorganic Chemicals Group
U.S. Environmental Protection Agency
Office of Air Quality Planning and Standards
Research Triangle Park, NC 27711

Please use the street address below for **nonconfidential** commercial package carriers, such as FedEx and UPS:

Donna Lee Jones (Mail Code D243-02) **NONCONFIDENTIAL**
Metals and Inorganic Chemicals Group
U.S. Environmental Protection Agency
Office of Air Quality Planning and Standards
4930 Old Page Road
Durham, NC 27703

If mailing your non-CBI files, the EPA recommends sending your non-CBI files via Registered U.S. Mail using either a return receipt request, Federal Express, or other method for which someone must provide a signature upon receipt.

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Confidential Data

Our preferred method to receive CBI is for it to be transmitted to the Office of Air Quality Planning and Standards (OAQPS) **electronically using email and attachments**, File Transfer Protocol, or other online file sharing services (e.g., Dropbox, OneDrive, Google Drive). Electronic submissions must be transmitted directly to the OAQPS CBI Office using the email address, **oaqpscbi@epa.gov**, and should include clear CBI markings. If assistance is needed with submitting large electronic files that exceed the file size limit for email attachments, and if you do not have your own file sharing service, please email **oaqpscbi@epa.gov** to request a file transfer link.

If you have questions regarding this request, please contact Donna Lee Jones at the email address **Jones.DonnaLee@epa.gov** or Chuck French at the email address **French.Chuck@epa.gov**.

Schedule for Submissions – Enclosures 1 and 2[a,b]

Item[a]	Submit by Date[b]	Days[b]
Submit detailed explanation of stack testing problems (**Enclosure 2**)	35 days	35
Fugitive monitoring plan, test plan, & QAPP (**Enclosure 2**)	45 days	45
Submit schedule(s) for stack testing (**Enclosure 2**)	12 weeks	85
Begin fugitive monitoring (**Enclosure 2**)	Within 40 days of the date EPA approves the monitoring plan	
Submit **Enclosure 1** responses	9 weeks plus 2 days	65
Notify your state of upcoming stack tests (copy to Dr. Jones)	21 days before testing	--
First 3 months of fugitive monitoring data (**Enclosure 2**)	Within 140 days of the date EPA approves the monitoring plan	--
Submit stack test reports & data spreadsheets (**Enclosure 2**)	22 weeks	154
Second 3 months of fugitive monitoring data	Within 230 days of the date EPA approves the monitoring plan	--

[a] All submissions should be done electronically or on electronic media (file, CD, DVD, or flash drive/USB) by: (1) email non-confidential files (< 10MB) to the ***Coke 2022 section 114 email*** address maintained by RTI (Coke.ICR2@rti.org). If assistance is needed with submitting large electronic files that exceed the file size limit for email attachments, please email Coke.ICR2@rti.org to request a file transfer link or (2) mail non-confidential files on CD/DVDs or flash drive/USB via private courier or U.S. post office to Dr. Donna Lee Jones, at the U.S. EPA Office of Air Quality Planning and Standards in RTP, NC., at the addresses listed above. See also detailed instructions described above regarding instructions for submitting CBI.

[b] From date of EPA email with Coke Oven section 114 information request package.

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PART A. BACKGROUND FACILITY INFORMATION

Please review previously submitted information from the 2016 section 114 request and update as needed in the Excel® file with your company's answers from the 2016 section 114 request and provide any new 2022 (or 2021) information in the provided Excel® Enclosure 1 Answer file. Questions that are grayed out do not have to be reviewed or filled out.

I. Owner Information
II. General Facility Information
III. Regulatory Information
IV. Process Flow Diagram, Source Table, Plot Plans, and Inventory Data
V. Emission Points
VI. Process and Emission Unit Operations
VII. Air Pollution Control and Monitoring Equipment
VIII. Economics/Costs
IX. Startup and Shutdown
X. Management Practices

I. Owner Information

1. Dun and Bradstreet number for your company.
2. Legal owner of facility.
    a. Full name of legal owner.
    b. Physical address (physical location) of legal owner of facility.
    c. Mailing address (if different than physical address) of legal owner of facility.
    d. Date of ownership.
    e. Is the legal owner a small entity?[1]
3. Legal operator of facility, if different from legal owner.
    a. Full name of legal operator.
    b. Physical address (physical location) of legal operator of facility.
    c. Mailing address (if different than physical address) of legal operator of facility.
    d. Date commenced as operator of this facility.
4. Contact(s) able to answer questions about the completed survey.
    a. Name and title of contact.
    b. Contact(s) telephone number.
    c. Contact(s) e-mail address
    d. What are the general work hours of each contact (e.g., 7 a.m. to 3:30 p.m.)
5. Contact(s) to receive email updates during section 114 process (no more than two contacts)
    a. If same as above, indicate "See above."
    b. If adding a contact, enter additional name and email.
6. Are you part of a larger corporate entity or joint venture? (Yes/No)
    a. If yes, is the facility operated under a joint partnership? If yes, provide the following for each partner:
        i. Partner name.

[1] See the following link for small business classification by NAICS
https://www.sba.gov/sites/default/files/files/Size_Standards_Table.pdf

ii. Percent ownership.
iii. Number of employees (approximate number of employees including all subsidiaries, branches, and related establishments owned).

b. If no, provide the following information:
i. Name of parent company.
ii. Total number of employees for the parent company (approximate number of employees including all subsidiaries, branches, and related establishments owned).
iii. List year and provide the current annual revenues for the parent company. (dollars) Current annual revenues should be provided for 2022 [*see previous section 114 data submitted for 2015, as applicable*]. If 2022 data are not yet available, provide data for 2021 instead. In lieu of annual revenues, facilities may provide net income as long as total expenses also are included and itemized (e.g., by cost category such as capital purchases, labor, equipment, raw material, services, etc).
iv. Select the statement that best applies (Yes/No):
1. Facility is fully independent of parent company.
2. Parent company provides some financial support.
3. Facility and parent company are fully integrated.

II. General Facility Information

7. Facility name.
a. What is the "official" facility name, i.e., name used on the operating permits?
b. What is the "nickname" of the facility, if any?
c. What previous names has the facility been called (include names used under other ownership, if known)?
d. Is the facility collocated with an integrated iron and steel manufacturing facility? If so, which facility?
e. If the facility is collocated with an integrated iron and steel manufacturing facility, then provide the percent of total coke, byproduct (where applicable), and steam production (where applicable) dedicated to the iron and steel manufacturing facility, including all coke, byproduct, and steam produced for said facility which does not reach the facility (*e.g.*, due to quality control, malfunction, or other issues).
8. Number of employees at the facility
9. Facility address (physical location).
10. Facility mailing address (if different than physical address).
11. Facility location.
a. Latitude coordinates, in decimal degrees to five decimal places
b. Longitude coordinates, in decimal degrees to five decimal places
12. North American Industry Classification System (NAICS) Code(s) applicable to the facility.
13. Toxic Release Inventory (TRI) ID number for facility (if applicable)
14. Greenhouse Gas Reporting Tool (e-GGRT) ID number for facility (if applicable)
15. Compliance and Emissions Data Reporting Interface (CEDRI) ID number for facility (if applicable)
16. Is the facility a major source of HAP? (Yes/No/Don't know)
a. If major source of HAP, list the HAP that qualify the facility as a major source using available documents or emission inventories.
b. If major source of HAP, list each process unit that emits HAP.

c. If major source of HAP, provide 2020 and 2021 [*ICR submission for 2014 and 2015 provided, where applicable*] emission inventories for each process unit.
d. If major source of HAP, is the facility subject to:
    i. 40 CFR part 63, subpart L for Coke Oven Batteries?
    ii. If yes, is the facility on the MACT or LAER track?
    iii. 40 CFR part 63, subpart CCCCC for Pushing, Quenching, and Battery Stacks?
e. If not a major source of HAP, did the facility take limits in their air permit to keep below major source thresholds for HAP?

17. Coke oven batteries
    a. How many functional coke oven batteries are located at the facility?
    b. How many coke ovens are contained in each battery?
    c. How many of the coke oven batteries were operated in 2021? Currently, in 2022? [*section 114 submission for 2015 provided, where applicable*]
    d. How many of your batteries are operating normally in 2022 (i.e., not on extended coking)? In 2021? [*section 114 submission for 2015 provided, where applicable*]

18. Quench towers
    a. How many functional quench towers are located at the facility?
    b. How many of the quench towers are used regularly, i.e., over 40% of total facility operating days?
19. Heat recovery steam generators (HRSG)– Heat Recovery Only
    a. How many functional HRSG are located at the facility?
    b. How many of the HRSG were operated in 2021? Currently, in 2022? [section 114 *submission for 2015 provided, where applicable*]

III. Regulatory Information

20. Please provide the most recent air permit(s) for all operations at your coke facility. Please send the permit(s) electronically via email **Coke.ICR2@rti.org**.
21. Indicate (Yes/No) whether or not the following federal regulations apply to your facility, including, but not limited to these listed below:
    a. NESHAP: Benzene Emissions at Coke By-Product Chemical Recovery Plants, part. 61, subpart L
    b. NESHAP: Integrated Iron and Steel NESHAP, part. 63, subpart FFFFF
    c. NSPS: Basic Oxygen Furnaces, part 60, subpart N or Na
    d. NSPS: Coal Preparation Plants, subpart Y
    e. NESHAP: Benzene Emissions from Wastewater, part 61 subpart FF
    f. NESHAP: Emission Standards for Equipment Leaks, part 61, subpart V
    g. NESHAP: Boilers (MACT), subpart DDDDD
    h. Identify any other federal regulations in 40 CFR subpart 60, 61, or 63 that apply to your facility that are not listed above.
22. List the state environmental regulations that apply to any units at your facility
    a. State regulation name and number
    b. Unit(s) subject to regulation
    c. Air pollutants and/or processes controlled (indicate media: air/water/wastewater)
    d. Requirements (emissions and testing) of state regulations.
23. Excess Emissions, Malfunctions or Deviations
    a. How many excess emission and deviation reports have you submitted in previous 2 years?

b. Provide any excess emission and deviation reports submitted in previous 2 years.

24. Title V or Air Permit deviations
    a. How many Title V deviations have you reported in previous 2 years?
    b. Provide any Title V deviation reports submitted in previous 2 years.

IV. Process Flow Diagram, Source Table, Plot Plans, and Inventory Data

25. Simple "***Process and Emission Flow Diagram***" (P&EFD).
*Please provide a simple "block" process and emission flow diagram (P&EFD) of all process units at your facility. The P&EFD should provide at least one system of identification codes for all significant process units involved in the production of coke at your facility, and should minimally include the related emission points that are identified in any state or Federal rule or emission inventory. Include one set of codes on this diagram and also indicate the type of code, e.g., facility, permit, inventory, etc. The P&EFD should clearly identify all process units and emission points related to the production of coke, including all control device(s) to which the emissions from these units are routed, from the following list of "**Sources of Interest**" (as defined in 40 CFR, part 63, subparts CCCCC and L):*
    - Coke oven batteries
    - Quench towers
    - Bypass vents and ducting (including common tunnels)
    - Heat recovery steam generators, and
    - All pollution control equipment

26. Detailed "***Source Table***"
*Please list all of your process and/or emission units relating to the above list of "Sources of Interest" (see question above) at your facility using the "***Source Table***" provided in the Excel® file included with this* section 114. *If more than one name is used, please provide the additional names. Please provide the information below in the appropriate column on the "***Source Table***":*
    a. **Facility ID/identifiers** for each process and emission point, as well as all other ID numbers assigned to these process and emission points, e.g., from your air permit, your state agency, and any state or federal emission inventories. All outside ID's assigned to your facility should be listed on this chart. Please add columns for any additional ID systems. For smaller units or emission points not shown on the P&EFD, include name and ID number of the nearest larger unit or emission point shown on the P&EFD. ***Note: Every process or emission point related to the "Sources of Interest" should be listed on the "*Source Table*" and show an ID number correspondence to at least one location included on the simple flow diagram (P&EFD), described above***
    b. **Coking status**: Please specify whether each battery is operating under extended coking or normal coking.

27. Plot plan.
Please provide a copy of an existing plot plan that includes each emission unit listed below at your facility related to the production of coke (as defined in 40 CFR, part 63, subparts CCCCC and L). Separate plot plans may be provided for each emission unit listed below. The plot plan should clearly indicate all the stationary equipment related to coke production or associated activities, e.g., HRSG and boilers, which are located at your facility:
    a. Coke oven batteries
    b. Charging/Pushing units
    c. Quench Towers
    d. Heat Recovery Steam Generators

e. All pollution control equipment at above [(a) – (d)] process/emission areas

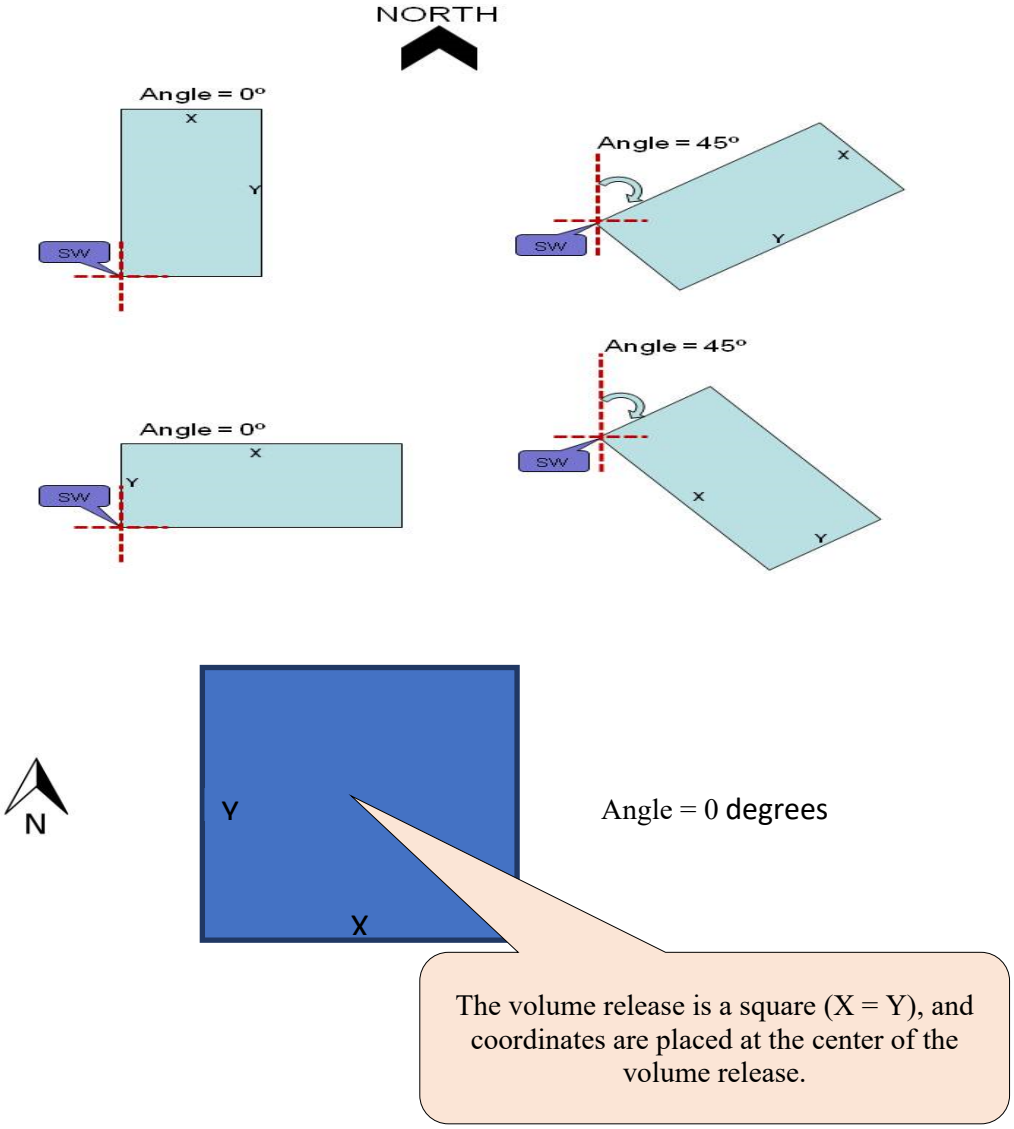
28. Inventory Information for all Coke Production Process Units/Emission Points (Coke Battery, Quench Towers, and Heat Recovery Steam Generator) *Please provide the following information in the "***Source Table***" included with your ICR and described above in* ***Question 26*** *if not already included. All information should reflect current (2022) configurations.* [*ICR submission for 2015 provided, where applicable*]
    a. Process unit/emission point name & number (facility ID)
    b. Process unit/emission point Agency ID No. (if available, as used by your state Agency)
    c. Process unit/emission point Permit ID No (if different than Agency ID No.)
    d. Latitude & longitude of each process/emission unit, in decimal degrees to five decimal places (
    e. For each coke oven battery, number of ovens in each battery
    f. Current (2022) coal capacity (dry tons) of each battery
    g. Coal charging capacity of each coke battery in 2022 (tons per year)
    h. Minimum coal charge requirements and maximum capacities in both a per oven (typical) and per battery basis for 2022
    i. Coke production design capacity of each battery (tons per year) in 2022
    j. Operating status of each process unit (operating, standby/idle, shut down, etc.)
    k. Date operations began for each process unit.
    l. Date of idle or closure for each unit idle or shutdown (if applicable)
    m. EPA Source Classification Code (SCC) for each process (see SCC worksheet in your 2016 data file to look-up SCCs) *If an SCC does not exist in the worksheet, please indicate in your worksheet*.
29. Provide the following information for each process and emission release point in the "**Source Table**" described above in Question 26. Units should be either indicated in the P&EFD, described above, or identified as nearby one of these units in the "**Source Table**".
    a. Emission Release Point ID - physical location point from which emissions from the process and/or emission units are released to the atmosphere (e.g., the stack ID associated with the control device.)
    b. Total capacity and actual production for years 2019, 2020, 2021, and 2022 (e.g., tons per year). [*ICR submission for 2012, 2013, 2014, and 2015 provided, where applicable*] Capacity information should be based on the highest potential production rate of each unit.
    c. Year that each unit began operating and year purchased (if different).
    d. If applicable, provide the following information regarding upgrades made in the last 2 years to each unit that resulted in a material increase or decrease in actual production:
        i. Description of the upgrade completed, including unit(s) affected and the year the upgrade was made. Your description must identify the unit(s) using the identifiers in the P&EFD described above.
        ii. Description of upgrades completed at air pollution control devices associated with each affected process unit and the year the upgrade was completed. Your description must identify the control device using the identifiers in the P&EFD required to be submitted in response to this survey.

V. Emission Points

30. Indicate whether facility air emission points are point sources or fugitive sources in the appropriate column of the "**Source Table**" described above, as described in **Question 26**, for the "Sources of Interest" of this ICR, as listed in **Question 25**
31. Indicate the type of control device used on all emissions points in the appropriate column of the "**Source Table**" for the "Sources of Interest."

32. If the emission release point for the "Sources of Interest." Is considered a point source, please also provide the following in the appropriate column:
    a. Stack coordinates, in decimal degrees to five decimal places:
        i. Latitude
        ii. Longitude
    b. Stack height (feet).
    c. Stack diameter (feet).
    d. Average exit stack gas flow rate (actual cubic feet per minute).
    e. Average exit stack gas temperature (degrees Fahrenheit).
    f. List all CEMS installed on stack and the pollutant it measures, e.g., CO, NO_x, SO_2, PM, opacity, or other (specify)
33. If the emission point for the "Sources of Interest" is considered a non-point (fugitive) source,[2] please provide:
    a. Coordinates of the southwest corner of the emission point, in decimal degrees to five decimal places.
        i. Latitude
        ii. Longitude
    b. Length in (x) direction (feet) (*see diagram below*)
    c. Width in (y) direction (feet) (*see diagram below*)
    d. Angle (degrees) from coordinates. Must be between 0 and 90 degrees. See the *diagrams* below for depiction of how to report angles.
    e. Release Height (feet).
    f. Average exit stack gas temperature (degrees Fahrenheit, ^oF).
    g. Average air flow rate (if known), in actual cubic feet per minute.
34. If the emission point is considered a volume source[2] (fugitive), please provide:
    a. Coordinates of the center of the emission point, in decimal degrees to five decimal places
        i. Latitude.
        ii. Longitude
    b. Horizontal dimension (x) (assumes a square)
    c. Height above ground of the center of volume source (half distance from ground to top of source) (feet)
35. If the emission point is considered a line source[2] (fugitive), please provide:
    a. Coordinates of one end of the emission line in decimal degrees, to five decimal places
        i. Latitude
        ii. Longitude
    b. Coordinates of other end of the emission line, in decimal degrees to five decimal places
        i. Latitude
        ii. Longitude
    c. Width of line source (feet).
    d. Release Height (above ground) of line source (feet)
    e. Line source release temperature (deg-f)
    f. If line sources are located at a building or other structure, a drawing showing the line source exit point from the building/structure along with the building/structure dimensions must be included.

[2] See http://en.citizendium.org/wiki/Air_pollution_dispersion_terminology for definition of these terms. Examples are as follows: a stack is a point source, a road way is a line source, and a roof monitor or other large opening in a roof is a volume source. The entire coke oven battery will be modelled as a volume source as well an individual oven. We will not be modelling individual ovens. See figure below.



VI. Process and Emission Unit Operations

In the **Source Table** *described above in* ***Question 26****, please provide the following for each coke oven battery, heat recovery steam generator (HRSG), quench tower, push-charge machine (heat recovery only) and flat push hot car (heat recovery only) presently at your facility.*

36. Total production capacity and actual production for years 2019, 2020, 2021 and 2022 (tons per year) for each individual **major** production unit, i.e., battery (for coke), HRSG (for steam). [*ICR submission for 2012, 2013, 2014, and 2015 provided, where applicable*]
37. The year that each unit began production and ***estimate of*** the remaining useful economic life of the unit, if possible. *Note:* EPA default value is 20 years for most equipment.

38. If applicable, provide the following information regarding upgrades made to each production unit (in the last 2 years) that resulted in an increase or decrease in emissions:
    a. Description of the upgrade made, including emission unit(s) affected and the year the upgrade was made. Include in your description an estimate of annual HAP emissions increase or reduction because of the upgrade and the basis for the estimate, if available. Please identify the emission unit(s) using the identifiers in the P&EFD described in Section IV, above.
    b. Description of upgrades made to air pollution control devices associated with each affected emission unit and the year the upgrade was made. Include in your description an estimate of annual emission reductions and the basis for the estimate, if available. Your description must identify the control device using the identifiers in the P&EFD submitted in response to this survey.

A. Coke Oven Batteries. [*ICR submission for 2015 or 2016 provided, where applicable*]

*Please provide the following current (2021 or 2022) information in the "***Source Table***" described above in* ***Question 26*** *for all your coke batteries, if not already included in this table.*

39. Operating status (e.g., operating, under construction or modification, planned future construction, or shut down. [For ovens that are shut down, under construction or modification, or for ovens that are planned for future construction, only answer the questions that you are able in the remainder of the survey.]
40. Oven manufacturer and design, including oven dimensions: length, width, and height.
41. Total operating hours, per battery, per day & year (2021).
42. Number of ovens are pushed each day in each battery.
43. Average time from charge to push all ovens in the battery for each battery (hours) (2021 or 2022).
44. Number and type of charging and pushing units.
45. How much coal is delivered each day to the facility, on average? If the facility only records truckloads, ***estimate*** the amount of coal in a typical truck load.
46. Date operation commenced for each battery (i.e., date on which each oven within each battery was fully operational).
47. Date of last major battery modification, decarburization, refractory repair, or other major modification or repair with description of action(s).
48. List all fuels combusted by the ovens in 2021; for each fuel, list its total usage volume, and contribution (in percent by heat input) to the total heat input of all fuel combusted by the ovens in 2021, e.g., natural gas (not pre-treated); Natural gas (pre-treated); Coal; Recirculated Coke Oven Gas; Other (specify).
49. List the factors that in the facility's experience have been found to contribute to length of coking time? Examples: coal type, coal, moisture, volatile content.

B. Heat Recovery Steam Generators (HRSG) - Heat Recovery Only [*ICR submission for 2014 and 2015 provided, where applicable*]

Please provide the following for all your HRSG. In the case of separate HRSG ownership, please request the owner provide this information to the EPA. Reports previously submitted to local agency can be used in lieu of response to the specific questions below.

50. A piping & instrumentation diagram (P&ID) of each HRSG, including associated dampers. [For HRSG that are shut down, under construction or modification, or for HRSG that are planned for future construction (e.g., redundant HRSG), only answer the questions that you are able in the remainder of the survey.]
51. Design heat input (million British thermal units per hour) and manufacturer.
52. Date operation commenced.

53. Source of feedwater in 2021 and 2022.
54. Indicate whether or not the HRSG is subject to the Boiler NESHAP (MACT), subpart DDDDD.
55. Fate of all steam produced in 2021 and 2022. Include a description of all upsets resulting in wasted steam (i.e., steam created by the HRSG which never reached the intended consumer. *(For example, the steam produced by each HRSG in 2021 was sent via pipeline to a neighboring facility)*
56. Dates of major tube section, economizer, soot blower, and superheater repairs, including work performed and cost in the last 12 months.
57. List all streams that pass through the HRSG, e.g. boiler feedwater; waste gas from coke ovens/common coke oven tunnel; or specify other.

C. Quench Towers [*ICR submission for 2014 and 2015 provided, where applicable*]

58. Design maximum and minimum coke quenching capacity, according to coke product specifications.
59. Source of quench water.
60. Number of gallons of quench water used in 2021 and 2022, if recorded.
61. List the design type and model number of each type of tower.
62. Describe design/shape of baffles, e.g. "chevron," including number of baffles.
63. How many quench towers have controls (e.g., baffles)? Please identify the type of control(s).
64. Is there a wastewater treatment facility on-site used for the quench water?
65. Date operation commenced
66. Dates of major repairs, including work performed and cost, if known.
67. List the coke oven batteries that produce coke which is cooled in each quench tower
68. Any exceedances of the total dissolved solids limit from 40 CFR, part 63, subpart CCCCC in the last 2 years? If so, specify or provide previous reports. *Please do not include any information not relevant to this question.*
    a. Date of exceedance
    b. Days to restore compliance
    c. Reason, if any, for exceedance?

D. Push-Charge Machines (PCM) - Heat Recovery Only [*ICR submission for 2014 and 2015 provided, where applicable*]

69. Design coal and coke capacity of PCM.
70. Description of PCM control equipment, including date operation commenced.
71. Total tons of coal charged by each PCM in 2021 and 2022.
72. Total tons of coke pushed by each PCM or in 2021 and 2022.
73. Dates of major outages and repairs of your PCMs, including repair work performed and cost, if known.

E. Pushing Capture and Control

74. Identify equipment used at your facility from list below (include all present and indicate on which battery equipment is used, if applicable
    a. duct
    b. fabric filter (portable)
    c. fabric filter (stationary)
    d. guide
    e. hood
    f. hood and duct

g. push/charge machine with controls (indicate type)
h. scrubber (stationary)
i. scrubber car
j. shed

75. What is the typical range in elapsed time from opening door(s) to push out coke to closing doors (low, average, and high, in minutes)? If the time differs by battery, please specify battery name & ID#.
76. For equipment identified above, indicate the percent capture or control if known. Report whether the information is from source tests, manufacturer information, or engineering judgement. If source tests are indicated, please send EPA a copy of your most recent report in the case that there are more than one report.
77. List the top parameters that effect timing of push, i.e., the end of coking period? Some examples are: control device/PCM availability; quench tower availability; and operator readiness. Indicate how much the timing of push can vary (low, average, and high, in minutes) with each parameter or, if not known, an overall range of variability.
78. For by-product plants, how many times in the last 12 months did you have green pushes from any oven at your facility? Indicate oven # and battery name/#.
79. For all of the green pushes in last 12 months, please describe the event, including reason for green push.
80. For heat and nonrecovery plants, list the number of times in the last 12 months that during visual inspection of each oven prior to pushing by opening the door damper and observing the bed of coke you observed there was smoke in the open space above the coke bed and/or an unobstructed view of the door on the opposite side of the oven. ***You can provide reports that record these determinations along with any non-compliance and deviation reports***.

F. HRSG Systems - Heat Recovery Only

Please provide the information listed below on your HRSG. Alternatively, you may provide tables or sections of reports submitted to your local agency that contain the same information. Please do not send the entire report if any of the other information is not applicable to these questions:

81. Specify the type of HRSG system design, e.g., once-through cooling water system; natural draft cooling tower; induced draft (fans at outlet) cooling tower; forced draft (fans for inlet air) cooling tower; or specify other.
82. How many bypass vents are at the facility?
83. What is the cooling water discharge rate for once-through systems (gallons per minute and per year)
84. For recirculating systems
    a. What is the cooling water recirculation rate (gallons per minute)
    b. What is the source of make-up water?
    c. Estimate how much make-up water is used (gallons per day or per month/year , as appropriate)
85. Provide the total number of HRSG serviced by the HRSG system (including redundant HRSG where applicable).
86. Specify if each HRSG system is subject to permit or other regulatory requirements.
87. Describe the monitoring performed for detecting tube leaks in each HRSG system and indicate if required in your permit or if voluntary:
    a. Monitor for leaks by entire HRSG system.
        i. Are simplifying assumptions for entrance mean concentration being used?

ii. What is current frequency of monitoring, e.g. hourly, daily, weekly, monthly, quarterly, annually, or specify other.
iii. Describe the method used to determine the concentration of the monitored substance in the cooling water.

b. Monitor for leaks by a combination of HRSG.
i. Are simplifying assumptions for entrance mean concentration are being used?
ii. What is current frequency of monitoring, e.g. hourly, daily, weekly, monthly, quarterly, annually, or specify other.
iii. Describe the method used to determine the concentration of the monitored pollutant in the cooling water.
iv. Identify each group of heat exchangers and provide the number of HRSG in each group.

c. Monitor for leaks by sampling at the inlet and outlet of each heat exchanger.
i. Are simplifying assumptions for entrance mean concentration are being used? (Yes/No)
ii. What is current frequency of monitoring?
iii. Describe the method used to determine the concentration of the monitored substance in the cooling water.
iv. Number of HRSG in HRSG system.

d. Monitor for leaks using a surrogate indicator of leaks.
i. Select what surrogate indicator is being used:
1. Ion specific electrode monitoring.
2. pH.
3. Conductivity.
4. Other (specify).
ii. Submit the monitoring plan as required by your permit or if voluntary action.

G. Battery Leaks (Regulated)

Please address the following information for your coke oven batteries

88. Identify the equipment subject to subpart L below, as per the following list:
a. Battery name & number
b. Number of lids per oven (average estimate)
c. Number of offtakes per oven
d. Total number of doors
e. Total number of lids
f. Total number of offtakes
g. Charges per year, per oven (average estimate)
h. Total charges per year (2015)
i. Typical charging cycle time (total hours)

89. Method 303/303A Inspection Data Summary for 2015 – Monthly and Rolling Monthly Averages – For By-Product and H&NR, as applicable. *Please complete the following for the period January 1, 2015 – December 31, 2015. If you report a shorter period, please specify.* If a battery was not operating in all or any of 2015 but is operating in 2016, use your reported information for 2016 to comprise 12 months of data as much as possible.
a. Battery name/number
b. Average seconds per charge (s/chg), by-product batteries
c. Average percent leaking doors (PLD), by-product and H&NR batteries

d. Average percent leaking lids (PLL), by-product batteries
e. Average percent leaking offtakes (PLO), by-product batteries
f. Average percent leaking collecting main, by-product batteries

90. List your charging (s/chg) and leaking (PLD, PLL, PLO) limits under 40 CFR part 63 subpart L for each battery. If the limit is same as per EPA rule, you can just specify EPA rule either "MACT" or "LAER". If "foundry" doors, please specify. If a lower state limit, please specify numeric value.
    a. Battery name/number
    b. Foundry doors?
    c. MACT or LAER or Other?
    d. Specify exact limit(s) for "Other": s/chg, PLD, PLL, PLO
91. For each detected leak or charge rate above your facility's limit (above) for doors, lids, or offtakes in the last 2 years (2014 & 2015) subject to subpart L, please provide the information listed below. Alternatively, you can provide tables or sections of reports submitted to your local agency which contain the same information. Please do not send the entire report if any of the other information is not applicable to this question:
    a. Date(s) exceedance detected and reported.
    b. Type of exceedance: charge, lid, doors, offtake.
    c. Battery name and oven number
    d. Date repaired
    e. Total number of days to repair
    f. For each repair taking longer than 45 calendar days, explain reason for delay. *For example: leaking equipment needed to be isolated from the process; repair was technically infeasible without a shutdown; the necessary equipment, parts or personnel were not available.*
92. Do you own or have ready access to an optical or thermal imaging device for detecting oven door, lid, and offtake leaks? (Yes/No) If yes:
    a. Provide the manufacturer and model number.
    b. Which of the following best describes the use of the imaging device by the facility? (Select all that apply.)

        - At the frequency required by a federal, state, or other air regulation in order to demonstrate compliance. Specify the regulation and provide the rule citation that requires use of the imaging device.
        - To voluntarily check for leaks on a routine basis (quarterly or more frequently).
        - To voluntarily check for leaks on an occasional basis (less frequently than quarterly).
        - To voluntarily check for leaks following non-routine operations.
        - Other (specify).

H. Cooling Water at HRSG - Heat Recovery Only

93. Is the HRSG subject to a National Pollutant Discharge Elimination System (NPDES) permit?
94. If yes:
    a. Do either of the following apply?
        i. Allowable discharge of 1 part per million by volume or less above influent concentration? (Yes/No)
        ii. Allowable discharge of 10 percent or less above influent concentration? (Yes/No)
    b. Does the permit require monitoring for detection of leaks of process fluid into cooling water? (Yes/No) If yes, select all that apply:

i. Permit specifies normal range of the parameter or condition.
ii. Permit requires monthly or more frequent monitoring.
iii. Permit requires reporting and correction of leaks.

c. Please submit a copy of your NPDES permit.

I. Postponed Questions from Above

95. (from Q. 16.a): If your facility (includes all sources and processes within the property boundary or "fence line") is a major source of HAP, list the HAP or HAPS that qualify the facility as a major source using available documents or emission inventories.
96. (from Q. 45) How much coal is delivered each day to the facility, on average? If the facility only records truckloads, ***estimate*** the amount of coal in a typical truck load.
97. (from Q. 23) Excess Emissions, Malfunctions or Deviations
    a. How many excess emission and deviation reports have you submitted in previous 2 years?
    b. Provide any excess emission and deviation reports submitted in previous 2 years.
98. (from Q, 24.b) Title V or Air Permit deviations
    b. Provide the Title V deviation reports submitted in previous 2 years.

VII. Air Pollution Control and Monitoring Equipment

99. Identify each emission monitoring device that monitors emissions from each process area or emissions point and each control device that captures and/or controls emissions from each process or emissions point (use emission release point ID #s, both facility and permit/state, from the P&EFD and plot plans) and include the information below:
    a. Type of monitor or control device.
    b. Year installed
    c. Does this device monitor or control HAP emissions or surrogates for HAP emissions?
    d. Identify ALL the pollutants monitored or controlled
    e. Identify the process or emissions point this device monitors or controls (use P&EFD codes)
    f. What year was the monitor or control originally installed?
    g. List any upgrades to each piece of monitoring or control equipment in the last 2 years. Include year, reason for upgrade, and cost (approximate, if available)
    h. Type of stack or release point.
    i. Longitude coordinates, in decimal degrees to five decimal places
    j. Latitude coordinates, in decimal degrees to five decimal places

VIII. Economics/Costs

100. Please provide the following information for your coke, chemical, and energy production processes to help us create an economic profile of the industry. We will be using this information to run our model to determine the economic impacts of our rules. Estimates can be labeled as such.
    a. Identify each process located your facility, among the following (add other processes not listed):
        i. Coke production (from coal transport, to coking, to quenching)
        ii. By-product chemical recovery (as applicable)
        iii. Heat recovery (HRSG)
        iv. Energy recovery for use or sale
    b. Amounts and cost of raw materials used in manufacturing coke
    c. Labor costs ($/hr, average by worker class)

d. Energy requirements for facility (BTU/hr or BTU/ton coke produced)
e. Operating and Maintenance (O&M) Costs ($/ton coke produced)
f. Cost benefit of energy sales ($/ton coke produced, $/yr, as appropriate)

IX. Startup and Shutdown

Please provide a copy of your Startup, Shutdown, and Malfunction Plan (SSMP). If you have a separate Malfunction or Emergency Response Plan, please also add this to your submittal.

A. Planned Shutdowns

The following questions apply to cokemaking operations and include all units that are air emission points themselves or (directly or indirectly) affect other cokemaking emission points. For the purposes of this survey, a planned shutdown event means a routine shutdown, scheduled in advance, for preventative maintenance, which are typically scheduled and budgeted for multiple months in advance.

101. Frequency of planned shutdown events (last 2 years).
102. Average amount of time required to shutdown during a planned event (hours).
103. Describe steps, work-practices, processes, or techniques the facility uses to minimize emissions during planned shutdown events.
104. Have you ever collected HAP emissions data during a planned shutdown event? (Yes/No) If yes, explain the type of HAP emissions data collected.
105. Do you expect HAP emissions to be higher, lower, or unchanged during planned shutdown events compared to normal operations? Provide an explanation for your answer.
106. For the last planned shutdown provide:
    a. Date of last planned shutdown.
    b. Amount of time required to shutdown during the event (hours).
    c. Provide a description of the last planned shutdown.
    d. Identify each HAP released (name and CAS number) during the event, the amount released (pounds), and a basis for the amount released.
    e. Identify the surveyed process units associated with the event (select all that apply).
    f. Identify the other process units associated with the event (select all that apply).
    g. Identify additional coke manufacturing or non-coke manufacturing related process units (if applicable) that were associated with the event that were not covered and identified above.

B. Unplanned Shutdowns

The following questions address coke manufacturing and include all ancillary units, as appropriate for only those ancillary units that are air emission points or directly or indirectly affect other air emission points. For the purposes of this survey, an unplanned shutdown event is due to external events outside the control of the operator (i.e., natural disaster or power failure).

107. Average frequency of unplanned shutdown events (last 2 years).
108. Average amount of time required to shutdown, including time required to redirect coke oven gases through bypass vents, during an unplanned event (hours).
109. Describe steps, work-practices, processes, or techniques the facility uses to minimize emissions during unplanned shutdown events.
110. Have you ever collected emissions data during an unplanned shutdown event? (Yes/No) If yes, explain the type of emissions data collected.

111. Do you expect emissions to be higher, lower, or unchanged during unplanned shutdown events compared to normal operations? Provide an explanation for your answer.
112. For the last unplanned shutdown provide:
    a. Date of last unplanned shutdown.
    b. Amount of time required to shutdown and reroute coke oven gases through bypass vents during the event (hours).
    c. Provide a description of the last unplanned shutdown.
    d. Identify each HAP released (name and CAS number) during the event, the amount released (pounds), and a basis for the amount released.
    e. Identify the surveyed process units (from section above) associated with the event (select all that apply).
    f. Identify the other process units (from section above) associated with the event (select all that apply).
    g. Identify additional coke manufacturing or non-coke manufacturing related process units (if applicable) that were associated with the event that were not covered and identified (in sections above).

C. Startups

*Based on information for the **last 2 years (2014&2015)**, please answer the following questions as they pertain to each emission unit related to coke operations within the coke facility property.*

113. Are there process differences between startup events and normal operations? (Yes/No) If yes:
    a. Provide an explanation of the differences.
    b. Do the differences present increased safety risks to workers or testers? (Provide an explanation.)
114. Have you ever collected emissions data during a startup event? (Yes/No) If yes, explain the type of emissions data collected.
115. Do you expect emissions to be higher, lower, or unchanged during startup events compared to normal operations? Provide an explanation for your answer.
116. For the last startup provide:
    a. Date of last startup.
    b. Amount of time required to startup during the event (hours).
    c. Provide a description of the last startup.
    d. Identify each HAP released (name and CAS number) during the event, the amount released (pounds), and a basis for the amount released.
    e. Identify the surveyed process units (from section above) associated with the event (select all that apply).
    f. Identify the other process units (from section above) associated with the event (select all that apply).
    g. Identify additional coke manufacturing or non-coke manufacturing related process units (if applicable) that were associated with the event that were not covered and identified in sections above.

D. Control Devices

117. For the control devices identified in section above, specify which (if any) control devices are used during startup, shutdown, or malfunction events.
118. For each control device, provide the following information:

a. Is the control device operation at all times, including during startup, shutdown, and malfunction events? (Yes/No) If no, describe when the control device is activated (or deactivated) during startup (shutdown).
b. Is there any expected change in control device efficiency during startup, shutdown, and malfunction events? (Yes/No) If yes, explain the expected change in efficiency.
c. Is the vent gas flow rate to the control device typically higher, lower, or unchanged during startup, shutdown, and malfunction events?

E. Malfunctions

119. Identify each malfunction event during the last 2 years (2014&2015) where emissions from equipment regulated by 40 CFR 63 Subparts CCCCC or L exceeded normal emissions, normal controls were bypassed, or the effectiveness of the normal control was reduced where normal is defined by the limits promulgated in 40 CFR 63 Subparts CCCCC and L and provide the following: (in lieu of entering your data in the provided spreadsheet, you may reference official reports submitted to local agencies or EPA)
    a. Date of event.
    b. Duration of the event (hours).
    c. Description of the event.
    d. Identify the surveyed process or emission units (from section above) associated with each malfunction (select all that apply).
    e. Identify the other process or emission units (from section above) associated with each malfunction (select all that apply).
    f. Identify additional coke manufacturing or non-coke manufacturing related process emission units (if applicable) that were associated with each malfunction that were not covered and identified in sections above.
    g. For each HAP released during the event, provide the following:
        i. HAP name and CAS number (See Appendix B).
        ii. Amount of HAP released during the event (pounds).
        iii. Description of method used to estimate the amount of HAP that was released during the event.

X. Management Practices

A. Operator Training

120. For each battery that you operate, is operator training required by a local or state agency as a condition of plant operation?
121. If yes, please name the battery/type training/frequency and agency(s).
122. List any company training (battery/type training/frequency)
123. For each battery that you operate please ***estimate*** how many hours of formal training are conducted in each of the following areas? Prior to Starting Work, During First Year of Employment, After First Year of Employment.
124. Who conducts the operator training? In-house personnel, Private contractor. State or local agency, other (specify

B. Best Management Procedures

125. Does the facility make written Standard Operating Procedures (SOPs) available to all operators? (Yes/No)

126. Does the facility keep Operations and Maintenance manuals from the equipment manufacturer near operator locations? (Yes/No)
127. Does the facility employ additional practices that ensure operation of the battery is consistent from one shift to another?
128. If yes, please explain.

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PART B. COKE BY-PRODUCT RECOVERY PLANTS (CBRP)

General Information [*Please fill in your Excel® answer file*]:

1. For the purposes of 40 CFR part 61 compliance, and as per the definitions in 40 CFR 61 subpart L below, do you consider your CBRP a *foundry coke by-product recovery plant* or a *furnace coke by-product recovery plant?*

   Foundry coke by-product recovery plant means a coke by-product recovery plant connected to coke batteries whose annual coke production is at least 75 percent foundry coke.

   Furnace coke by-product recovery plant means a coke by-product recovery plant that is not a foundry coke by-product recovery plant.

   Foundry coke means "coke that is produced from raw materials with less than 26 percent volatile material by weight and that is subject to a coking period of 24 hours or more. Percent volatile material of the raw materials (by weight) is the weighted average percent volatile material of all raw materials (by weight) charged to the coke oven per coking cycle"[3] and is coke that will be used to make foundry products.

   Furnace coke means "coke produced in by-product ovens that is not foundry coke"[3] and is coke that will be used in blast furnaces.

2. If your coke facility produces both foundry coke and furnace coke, please provide a breakdown of each type of coke for last three years, as a percentage of annual coke produced, as well as your best guess as to 2022.

   2022: _____percent foundry (best guess/estimate)

   2021: _____percent foundry

   2020: _____percent foundry

   2019: _____percent foundry

3. Provide a detailed **Overall Process Diagram** of your CBRP. Include all processes, products, and waste streams. Use unique identifiers (i.e., numbers, letters, as an ID code), that can be cross-referenced between the **Overall Process Diagram**, the description described below, and the **CBRP Process Inventory** table below.
4. Provide a **Simple Overview Map** of the facility that identifies the locations of each process group.
5. Provide detailed descriptions of the processes at the CBRP and **CROSS-REFERENCE** to the **Overall Process Diagram** with **unique ID code** for each process unit, vessel, coolers, control device, air emission point, storage unit, wastewater treatment units, loading operations units, and all other

[3] Section 61.131, 40 CFR Part 61 subpart L -- National Emission Standard for Benzene Emissions from Coke By-Product Recovery Plants.

components of the CBRP. Cross-reference with **unique ID codes** from the **CBRP Process Inventory** described below and include the following:

a. Describe the movement of COG through and after CBRP and include a description of all potential emissions points, including pressure release valves, condensate collection, bleed points, bleeder control valves, boilers, flares, other combustion devices, etc. If any of the emission points are regulated under another NESHAP or a state or local rule, include a reference to the rule(s) to which they are subject in the descriptions.

b. Describe how each product stream is isolated from the COG.

c. Describe all further product refining processes, include tar products, light oil products, naphthalene products, and any others.

d. Identify the point of generation for each HAP-containing waste stream, whether fitting the definitions in 40 CFR 61 subpart FF or not (use ID Codes, if at all possible), and provide details of how applicable waste streams are managed to comply with 40 CFR 61 subpart FF.

6. Provide an inventory of each CBRP process unit that includes its unique ID codes and a brief summary of its function. Please fill in the same table, as below, in your Excel® answer file (insert rows as necessary). **Some examples are provided in the table below. Include all process units and process groups at your CBRP.** The inventory should be cross-referenced with the **Overall Process Diagram** and the detailed descriptions required above. The inventory should begin with coke oven gas collection at the batteries and include, but is not limited to the following:

   a. Identify all air emission points of COG or other chemical/HAP emissions.

   b. Identify SCC, where applicable. (See SCC list in **Appendix C**). Where an SCC describing the emission point does not exist, please note this fact in your worksheet table and add this emission point to the end of the SCC worksheet table (example shown in **Appendix C**).

   c. Identify all streams of HAP-containing fluids.

   d. Identify all product streams, including clean coke oven gas returned to batteries or elsewhere; benzene production, ammonium sulfate manufacturing, etc.

   e. Identify All product processing streams, including tar processing, light oil refining, naphthalene processing, ammonia processing, wash-oil cooler system, gas cooler, ammonia removal, light oil separation and processing, light oil condenser, naphthalene processing, light oil refining.

   f. Identify all control devices, including flares; units that combust or use COG as a fuel including steam generation boilers; waste streams, handling, and wastewater treatment; storage vessels/tanks; loading / transfer operations; desulfurization plants.

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CBRP Process Inventory

Process Unit/ID Code	Process Group	Process/Unit	Function	Air Emissions Streams	Emission Control System	Applicable EPA, State, and Local Regulation(s)	SCC[4]	Takes Inputs From?	Output Goes To?
example	Tar Separation and Processing	Initial flushing liquor spray in COG collection main	Cool COG and condense tar	Leaks	Closed system. LDAR program	Fill in	Fill in	COG from coke oven batteries.	COG to Primary Cooler.
							Fill in	Lean flushing liquor from flushing liquor tank via pump.	Flushing liquor and condensed tar to tar decanter.
example	Tar Separation and Processing	Primary Cooler	Cool COG and condense tar	Leaks	Closed system. LDAR program.	Fill in	Fill in	COG from COG main after initial flushing.	COG to ESP vis exhauster.
							Fill in	Flushing liquor from flushing liquor tank via pump.	Tar condensate to Tar Decanter.
example	Tar Separation and Processing	Tar Decanter	Tar Processing	Leaks, fumes, volatilization	Raw COG Gas Blanketing with LDAR	Fill in	Fill in	Main and Primary Cooler	Crude Tar

7. Describe the SOPs or work practices used to minimize emissions at all units at the CBRP. Please provide requested documents and indicate in the table below. Separate between LDAR practices, and SOPs or work practices with and without written plans. Cross reference process unit to the **Overall Process Diagram** referenced above. Please provide any related capital and labor costs in the table provided in your answer file that is similar to the one shown in **Appendix D**.

[4] See list of CRBP SCCs in **Appendix C**.

SOP or Work Practices Used To Minimize Emissions at CBRP

Process unit name & ID Code *(from Overall Process Diagram)*	Provide LDAR plan and list file name below	Brief description of LDAR program	If required by a rule, reference the rule below	Provide determination report and list file name below

Process unit name & ID code (continued)	Brief description of procedures used to minimize emissions other than LDAR	Provide written LDAR plan and indicate file name below	Typical SOP or work practice Schedule	If work practice does not have a routine schedule, indicate number of times implemented per day/week/month/year, on average, in previous three years

Process unit name and ID Code (continued)	Description of SOP or work practices that are not LDAR and not in a SOP or plan	Typical SOP or work practice schedule	If no schedule, describe what triggers implementation of the SOP or work practice.	If work practice does not have a routine schedule, indicate number of times implemented per day/week/month/year, on average, in previous three years

8. Provide a detailed description of the gas blanketing system(s) in the table below that is cross-referenced to the gas blanketing system on the **Overall Process Diagram** and **CBRP Process Inventory** discussed above:
   a. Provide a diagram of the gas-blanketing system(s) that corresponds to the **Overall Process Diagram** and the **Gas Blanketing Inventory** required here.

b. Include in the **Gas Blanketing Inventory** table below a description all units involved in gas blanketing and the potential emission sources. Describe the circumstances in which blanket gas can be released/vented. Describe regular maintenance, including purging, cleaning, condensation collection, etc.

Gas Blanketing Inventory

Gas blanketing system name or ID Code *(from Overall Process Diagram)*	Type and description of blanketing gas used	Operating pressure	Method(s) of gas pressure control	List of process units connected to system	List of pressure relief devices	List of condensate collection points	Describe the regular maintenance of gas blanketing system	List of units combusting COG other than coke ovens (including flares)

9. For the past 3 years (or last ten (10) shutdowns, whichever is shorter), provide a list of all complete or partial shutdowns of the gas blanketing systems that are in use at the CBRP:

History of Gas Blanketing System Shutdowns

Process Units Effected & ID Codes *(from Overall Process Diagram)*	Date Range of Shutdown	Indicate if Complete or Partial Shutdown of Blanketing System	Duration of Shutdown (days/hours/minutes)	Reason for Shutdown	Description of Maintenance Performed

10. For CBRP process units, in the table below provide detailed descriptions of any alternative means of emission limitations, alternative work practices, or other alternative means utilized for demonstrating compliance with standards or work practices required by 40 CFR Part 61 subpart L, subpart V, subpart FF, or other applicable EPA, state or local rule. Include documentation of application for and approval of alternative means of emissions limitation. Please provide any related capital and labor costs in the table in the table provided in your answer file that is similar to the one shown in **Appendix D**.

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Alternative Means of Demonstrating Compliance

Source/Emission point and ID code *(from Overall Process Diagram)*	Reference to applicable rule for which alternative demonstrates compliance	Description of alternative means of emissions limitation	Include documentation of alternative and indicate file name below

11. For CBRP process units, provide detailed descriptions of any alternative monitoring or testing utilized for demonstrating compliance with monitoring or testing requirements required by 40 CFR Part 61 subpart L, subpart V, subpart FF, or other applicable EPA, state or local rule. Include documentation of application for and approval of alternative. Please provide any related capital and labor costs in the table provided in your answer file that is similar to the one shown in **Appendix D**.

Alternative Monitoring/Testing Used For Demonstrating Compliance with Applicable Federal/State/Local Regulations

Source/Emission Point and ID Code *(from Overall Process Diagram)*	Description of Measure	Documentation Included?

12. For sources that are defined as *foundry* CBRP for the purposes of 40 CFR 61 subpart L (§61.131), provide a list of all storage tanks to include BTX, light oil, excess ammonia-liquor, or any other HAP-containing tank not applicable to subpart L and include a description of the tank that includes type of tank and any emission control equipment or work practices used.

Foundry Coke Storage Tanks Used at the CBRP for Compliance with 40 CFR 61 Subpart L §61.131

Tank ID Code *(from Overall Process Diagram)*	Tank Contents	List any other substances stored	Type of Tank (e.g., fixed roof, floating roof, pressurized)	Reference to all applicable EPA, state, or local air rules	Emission Control Equipment	Work Practices to Reduce Emissions

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13. Provide a description of equipment maintenance schedules that include maintenance that is performed to ensure there are no leaks from CBRP equipment, and maintenance and repairs completed that were not part of an LDAR program over the past 3-years. Cross reference to the **Overall Process Diagram** referenced above. Include typical labor time and equipment/parts needed for checking for leaks, and for fixing leaking equipment if found.

Description of Equipment Maintenance Schedules

Process Unit and ID Code *(from Overall Process Diagram)*	Maintenance Schedule	Repairs Completed	Labor Time for Checking for Leaks	Equipment/Parts Needed for Checking for Leaks	Labor Time for Fixing Leaking Equipment	Equipment/Parts Needed for Fixing Leaking Equipment

14. Storage: Provide a list of all storage tanks / vessels and associated information related to tank use, contents, emission control measures, and permit requirements *Remember to provide units of measure (UOM) with your values*.

Storage Tanks at CBRP

Tank / Vessel ID Code *(from Overall Process Diagram)*	Type and Size (UOM)	Throughput (UOM)	Average tank throughput per year	Description and citation of all applicable permit requirements for the tank / vessel	Cross-reference with ID Codes used in the Overall	Substance(s) stored, maximum true vapor pressure (UOM)	Typical HAP composition	Description of any emission points and control devices

15. For flares or enclosed combustors. Provide an inventory of all flares or enclosed combustors in the table below and cross-reference to the **Overall Process Diagram.** Provide detailed description of flare or enclosed combustor specifications and operations.

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Flares or Enclosed Combustor Inventory

Unit ID Code *(from Overall Process Diagram)*	If not flare, indicate type of enclosed combustor	Reference any EPA, state, or local rule(s) applicable to operation of the flare or enclosed combustor	Detailed description of flare or enclosed combustor specifications and operations	How is operation of the flare or enclosed combustor monitored?	Is the flare or enclosed combustor steam or air assisted?	What level of control does the flare or enclosed combustor achieve?	Under what circumstances is the flare or enclosed combustor operated?	What stream(s) are routed to the flare or enclosed combustor? *(from Overall Process Diagram)*	Is auxiliary fuel used? If so, what type and how much

Flares or Enclosed Combustor Inventory - Continued

Unit ID Code *(from Overall Process Diagram)*	Does the flare have a continuously lit pilot flame or does it use an electronic igniter?	If an igniter is used, what are the measures taken to ensure ignitor works whenever needed?	What is the maximum permitted gas velocity?	What is the waste gas net heating value? (BTU)	What is the approximate amount of time each flare is used on a daily/weekly/annual basis?	Please provide the results of visible emission tests for each flare for the past full year	For flares with ignitors, how many igniter plugs are used and how many igniter transformers?	List all flare citations/NOV issued by state/local/EPA inspectors in last year

16. Waste Streams: Provide a detailed inventory of all HAP-containing waste streams (whether fitting the definitions in 40 CFR 61 subpart FF or not), include a description of the waste stream, cross-referenced to the **Overall Process Diagram** and ID code referenced above. Provide any additional information of how each waste stream is managed to comply with 40 CFR 61 subpart FF, if not already included in the table.

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Waste Streams at the CBRP

Waste Stream ID Code *(from Overall Process Diagram)*	Description of waste stream and processes/units in which it is produced	Reference any EPA, state, or local rule(s) applicable to the handling, processing, or disposal of the waste stream	Describe the handling, treatment, and disposal of the waste stream, including all potential volatile chemical emission points and emission reduction measures	Describe control device(s) and control performance associated with waste stream	For all benzene-containing waste with >10 water, indicate mass of benzene in waste per year. Provide documentation of each of these calculation in a single file.	For all waste streams applicable to 40 CFR 61 subpart FF, indicate the point of initial generation of the waste stream (ID code)	In additional columns, list all the HAP/VOC in the waste stream and provide speciated % composition for each HAP in the adjacent column, if available

17. For the last 5 years, list each instance that repair of a unit applicable to 40 CFR subpart FF was delayed, as described in §61.350.

Repair Delays for Units Regulated Under 40 CFR subpart FF in §61.350

Waste Stream ID Code *(from Overall Process Diagram)*	Unit ID Code *(from Overall Process Diagram)*	Description of repair needed and steps necessary to make the repair	Date the need for repair was discovered	Date that repair was made (if repair has not been made, indicate planned data of repair)	Did the delay in repair lead to excess emissions of benzene and other HAP? If so, provide an estimate of excess emissions for each HAP in a new column.

18. **CBRP marketable and other non-waste products.** Provide an inventory of all non-waste products produced at the CBRP that are both utilized onsite or transferred offsite. Add rows for all other non-waste products in additional rows.

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Marketable Non-waste Products at CBRP

Non-waste Product & Process ID Code *(from Overall Process Diagram)*		Identify if utilized or handled onsite; and describe how	If transferred offsite, list type of locations (e.g., to a related plant, to suppliers, to end users, etc.)	Description of the product's typical end use(s)	Description of the product's composition, including non-HAP	Speciated % composition of all HAPs (use additional columns for each HAP)
Tar sludge	ID Code					
COG blanketing system condensate	ID Code					
Coal Tar (speciate in separate rows)	ID Code					
Light oils (speciate in sperate roes)	ID Code					
Etc						
Etc						

19. Provide a detailed, step by step, description of transfer, storage, and fate of all products of the CBRP that are transferred offsite. Indicate potential sources of leaks (VOC/HAP) at each step in transfer operations. List and describe any emission controls or mitigation techniques that is taken at all applicable steps.

Transfer Operations

Non-waste product and unit ID code *(from Overall Process Diagram)*	Location of transfer operations (and ID Code)	Describe transfer operations and receiving vessels	Location of onsite storage (and ID Code)	Describe storage used in transfer operations	Describe fate of product transferred

Transfer Operations (continued)

Non-waste product unit ID code *(from Overall Process Diagram)*	Indicate sources of VOC/HAP leak during transfer operations	Describe any emission control devise or mitigation technique used for transfer operations	Estimate total labor time for mitigation technique	Type of labor used for mitigation (e.g., technician, skilled worker, manager, etc.)	If equipment is used, include capital cost and year$	If equipment is used, include O&M costs and year$

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20. Plant production by product type (specify units, e.g., tons, gallons, ft^3, etc.): historic and most recent typical year.

CBRP Production

Product Group	Individual Products	Annual Production				If used onsite, where?	Transferred Offsite?	
		2020	2021	Or Most Recent Year	UOM		Where?	List Loading Operations
Light oils	Oil1							
	Oil2							
	Etc.							
Naphthalene Production	Product1 (Naphthalene)							
	Product 2							
	Product 3							
Etc								
Etc								

21. Provide loading emissions in the table below, if known**.**

Loading Emissions

Last CBRP Unit Before Loading Name & ID Code *(from Overall Process Diagram)*	Chemical Name	Molecular Weight	Mass Fraction	Pure Vapor Pressure (psia)	Partial Vapor Pressure (psia)	Loading Loss (TPY)
Unit 1	chemical 1					
	chemical 2					
	etc.					
Unit 2	chemical 1					
	chemical 2					
	etc.					

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22. **CBRP VOC/HAP Emissions.** Please provide the information in the table below for all units that emit VOC/HAP. For each VOC/HAP emitted at the CBRP, provide a breakdown of emissions from each unit and product/chemical type. Add rows as necessary. See **Appendix B** for a list of HAP.

CBRP VOC/HAP Emissions

CBRP Unit and ID Code *(from **Overall Process Diagram**)*		**Year of Data**	**Throughput**		**Air Emissions (HAP/VOC)**		
			Product/ Chemical Type	**UOM**	**Name of Chemical**	**Estimated Annual Emissions (TPY)**	**Calculation Method** [5]
Condenser	[ID code]		[Product 1]				
			[Product 2]				
			Etc.				
Primary cooler	[ID code]						
Final Cooler	[ID code]						
Cooling tower	[ID code]						
Tanks/process vessels (list each)	[ID code]						
Equipment leaks	[ID code]						
Light oil sump(s)	[ID code]						
Tar/light oil loading	[ID code]						
Light oil loading	[ID code]						
Tar loading	[ID code]						
Tar storage	[ID code]						
Tar intercept sump	[ID code]						
Tar intercept sump/ dewatering	[ID code]						
Tar decanter sludge loading	[ID code]						
Flushing liquid circulating tank	[ID code]						
Ammonia liquid tank	[ID code]						
Excess ammonia; flushing liquor tanks	[ID code]						
Biological treatment	[ID code]						

[5] Examples: engineering judgement, stack test, emission factor, or describe other. The table following provides more room for detailed descriptions.

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CBRP VOC/HAP Emissions

CBRP Unit and ID Code *(from **Overall Process Diagram**)*		**Year of Data**	**Throughput**		**Air Emissions (HAP/VOC)**		
			Product/ Chemical Type	**UOM**	**Name of Chemical**	**Estimated Annual Emissions (TPY)**	**Calculation Method [5]**
Pitch traps/ TDS boxes	[ID code]						
Aeration basins	[ID code]						
Naphthalene Processing	[ID code]						
Light-oil refining	[ID code]						
Each storage tank (list each on new row)	[ID code]						
Each loading operation	[ID code]						
Fugitive emissions from leaks	[ID code]						
[*add lines for additional units*]							

23. **HAP/VOC Emission Estimates**. Please provide details of how the emission estimates were determined in the **CBRP VOC/HAP Emissions** table above. Use as many rows as you need to address all the CRPR units, VOC/HAP, and methods.

Details of HAP/VOC Emission Estimates

CBPR Unit Name & ID Code ***(from Overall Process Diagram)***		**Emission Factor (w/ units)**	**Reference for Emission Factor**	**Name of HAP/VOC and VOC Basis**	**HAP/VOC Emissions (TPY)**	**Year of Data**
	[ID code]					
	[ID code]					

24. Are there any notice of violations (NOVs) or administrative orders or consent orders that currently apply or have applied to your facility's CBRP operations (40 CFR part 61 subpart L) or Benzene Waste Operations (40 CFR part 61 subpart FF) in the last **5 years**? Please list and attach copy of the NOV or order along with your Coke Ovens section 114 responses.

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Notice of Violations (NOV), Administrative Orders, Consent Orders for 40 CFR part 61 subpart L or FF

Date of NOV or Order	Affected Time Period	Summary of violations in NOV / order	Summary of requirements of NOV/ order	Issuing Office of the NOV / order	Filename of NOV / order

25. Are there any notice of violations (NOVs) or administrative orders or consent "orders" relating to state or local air rules that currently apply or have applied to your facility in the last **5 years**? Please list and attach copy of the decree along with your Coke Ovens section 114 responses.

Notice of Violations (NOV), Administrative Orders, Consent Orders for State/Local Rules for CBRP

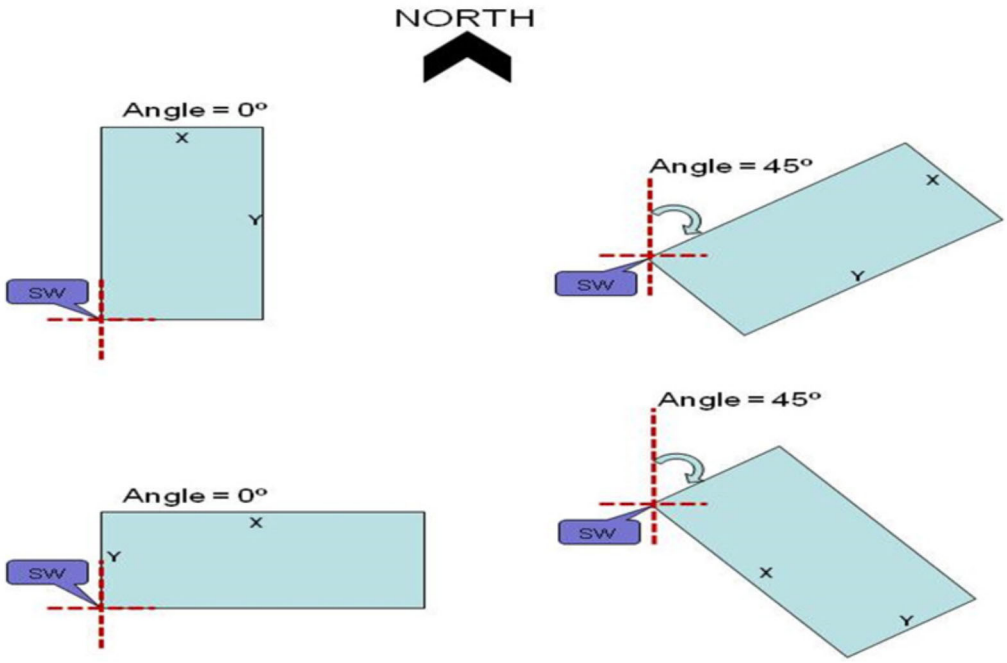
Date of NOV / Order	Reference to state or local rule(s)	Process unit(s) effected	Affected Time Period	Summary of violations for NOV / order	Summary of requirements of NOV / order	Issuing Office of the NOV / order	Filename of NOV / oder

26. **What are the approximate fugitive height, length, width, angle, and southwest corner latitude and longitude coordinates of the CBRP?**

Please review the values developed for the coke modeling input file below (and update as necessary. The latitude and longitude coordinates were derived from the southwest corner of the rectangle drawn around the collection of CBRP units with Google Maps™. (See **Figure 1**, below). The fugitive modeling release heights were set at the median stack height (ft) of the applicable equipment, which were provided by the COETF. The fugitive length and fugitive widths were determined from the rectangle drawn around the collection of ByP plant units with Google Maps™ (Denoted as x and y in **Figure 1** below). The fugitive angle, which is the angle between the side of the rectangle and due north on the southwest corner of the rectangle in **Figure 1** below, also was established with Google Maps™.

Facility ID	Fugitive Height (ft)	Fugitive Length (ft)	Fugitive Width (ft)	Fugitive Angle (degrees)	Southwest Corner Longitude (X coordinate)	Southwest Corner Latitude (Y coordinate)
ABC-Tarrant-AL	31.1671916	130	245	0	-86.77998	33.58141
CC-Follansbee-WV	8.390748031	560	230	60	-80.60737	40.34524
CC-Middletown-OH	10	960	350	40	-84.38528	39.47831
CC-BurnsHarbor-IN	8.497375328	820	270	0	-87.14539	41.62606
CC-Monessen-PA	20	440	200	10	-79.88853	40.16324
CC-Warren-OH	12	240	305	0	-80.81594	41.20476
BLU-Birmingham-AL	12.4671916	250	240	40	-86.80162	33.56447
EES-RiverRouge-MI	13.12335958	460	310	20	-83.11259	42.28189
USS-Clairton-PA	27.5	1270	400	50	-79.88105	40.30841

Figure 1. Depiction of Fugitive Area Source Parameters



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PART C. WORK PRACTICES FOR BY-PRODUCT COKE MANUFACTURING FACILITIES: COKE OVEN DOORS, LIDS, OFFTAKES, AND CHARGING

Information regarding leaks and emissions due to leaks from coke oven doors, lids, offtakes, and charging, and potential work practices, improved equipment, and/or other measures or approaches to minimize leaks and emissions from lids and offtakes.

1. Identify the 2021 equipment subject to part 63, subpart L below, as per the following list:
    a. Battery name/number
    b. Number of lids per oven (average estimate)
    c. Number of offtakes per oven
    d. Total number of doors
    e. Total number of lids
    f. Total number of offtakes
    g. Charges per year, per oven (average estimate)
    h. Total charges per year (2021)
    i. Typical charging cycle time (total hours)

2. Method 303/303A Inspection Data Summary for 2021 – Monthly and Rolling Monthly Averages – For By-Product and H&NR, as applicable. *Please complete the following for the period January 1, 2021 – December 31, 2021. If you report a shorter period, please specify.* If a battery was not operating in all or any of 2021 but was operating in 2022, use your reported information for 2022 to comprise 12 months of data as much as possible.
    a. Battery name/number
    b. Average seconds per charge (s/chg), by-product batteries
    c. Average percent leaking doors (PLD), by-product and H&NR batteries
    d. Average percent leaking lids (PLL), by-product batteries
    e. Average percent leaking offtakes (PLO), by-product batteries
    f. Average percent leaking collecting main, by-product batteries

3. For each detected leak or charge rate above your facility's limit (above) for doors, lids, or offtakes in the last 2 years (2020 & 2021) subject to subpart L, please provide the information listed below. Alternatively, you can provide tables or sections of reports submitted to your local agency which contain the same information. Please do not send the entire report if any of the other information is not applicable to this question:
    a. Date(s) exceedance detected and reported.
    b. Type of exceedance: charge, lid, doors, offtake.
    c. Battery name and oven number
    d. Date repaired
    e. Total number of days to repair. For each repair taking longer than 45 calendar days, explain reason for delay. For example*: leaking equipment needed to be isolated from the process; repair was technically infeasible without a shutdown; the necessary equipment, parts or personnel were not available, etc.*

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4. Please provide the information below regarding current work practices, improved equipment, and/or other measures or approaches used at your facility currently or in the past to minimize leaks and emissions from doors, lids, offtakes, and charging. **Please add rows as necessary**. Please include those practices required by the rule as well as work practices your facility performs voluntarily.

Indicate if for doors, lids, offtakes, or charging	Work practice / Equipment / Other measure Description	Cost - Capital Purchases and Year$	Cost - Annual Operating Expenses and Year$	Labor (hrs/day)	Labor (hrs/week)	Labor (hrs/yr)	Type of Labor (e.g., (technician, skilled worker, manager, etc.)	Estimated Control efficiency (%) of Work Practice	Other Notes
Doors									
Lids									
Offtakes									
Charging									

5. Please provide the information below regarding specific practices/equipment **now using or considered** at your facility. Add rows as needed.

Work practice / Equipment / Other Measure Description	Indicate if for doors, lids, offtakes, or charging	Indicate if currently using, tried in past, or considered in past	Use Cost Table in Appendix D to Provide Costs and Add Here	Describe how well it works/ worked	Describe why not using anymore
a. A program for the inspection, adjustment, repair, and replacement of coke oven doors and jambs, and any other equipment for controlling emissions from coke oven doors, including a defined frequency of inspections, the method to be used to evaluate conformance with operating specifications for each type of equipment, and the method to be used to audit the effectiveness of the inspection and repair program for preventing exceedances	doors				
b. Procedures for identifying leaks that indicate a failure of the emissions control equipment to function properly, including a clearly defined chain of command for communicating information on leaks and procedures for corrective action	doors				

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Work practice / Equipment / Other Measure Description	Indicate if for doors, lids, offtakes, or charging	Indicate if currently using, tried in past, or considered in past	Use Cost Table in Appendix D to Provide Costs and Add Here	Describe how well it works/ worked	Describe why not using anymore
c. Procedures for cleaning all sealing surfaces of each door and jamb, including identification of the equipment that will be used and a specified schedule or frequency for the cleaning of sealing surfaces	doors				
d. For batteries equipped with self-sealing doors, procedures for use of supplemental gasketing and luting materials, if the owner or operator elects to use such procedures as part of the program to prevent exceedances	doors				
e. For batteries equipped with hand-luted doors, procedures for luting and reluting, as necessary to prevent exceedances; (vi) Procedures for maintaining an adequate inventory of the number of spare coke oven doors and jambs located onsite; and (vii) Procedures for monitoring and controlling collecting main back pressure, including corrective action if pressure control problems occur	doors				
f. Flexible door seals	doors				
g. Periodic complete oven overhaul:	doors				
i. Inspection of the oven;	doors				
ii. Degraphitizing of all deposits within the chamber (walls, ceiling, ascension pipes);	doors				
iii. Oxy-thermic welding of cracks, holes and surface damage of the refractory brickwork;	doors				
iv. Repair of the oven chamber floor by flooding with cement;	doors				
v. Injection of dust into fine cracks;	doors				
vi. Complete overhaul of the doors; complete dismantling of all individual parts, cleaning and reassembling; readjustment of the sealing elements;	doors				
vii. Replacement of damaged door bricks; complete rebricking of the door may be necessary; and	doors				
viii. Use of coke oven chamber wall diagnosing-repairing apparatus.	doors				
h. Careful cleaning of the door and its frame at each coke push	doors				
i. Gas channels inside the doors	doors				
j. Procedures for equipment inspection and replacement or repair of topside port lids and port lid mating and sealing surfaces, including the frequency of inspections, the method to be used to evaluate conformance with operating specifications for each type of equipment, and the method to be used to audit the effectiveness of the inspection and repair program for preventing exceedances	lids				
k. Procedures for sealing topside port lids after charging, for identifying topside port lids that leak, and procedures for resealing	lids				

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Work practice / Equipment / Other Measure Description	Indicate if for doors, lids, offtakes, or charging	Indicate if currently using, tried in past, or considered in past	Use Cost Table in Appendix D to Provide Costs and Add Here	Describe how well it works/ worked	Describe why not using anymore
l. Using luted lids	lids				
m. Procedures for equipment inspection and replacement or repair of offtake system components, including the frequency of inspections, the method to be used to evaluate conformance with operating specifications for each type of equipment, and the method to be used to audit the effectiveness of the inspection and repair program for preventing exceedances	offtakes				
n. Procedures for identifying offtake system components that leak and procedures for sealing leaks that are detected	offtakes				
o. Procedures for dampering off ovens prior to a push.	offtakes				
p. Procedures for equipment inspection, including the frequency of inspections, and replacement or repair of equipment for controlling emissions from charging, the method to be used to evaluate conformance with operating specifications for each type of equipment, and the method to be used to audit the effectiveness of the inspection and repair program for preventing exceedances	charging				
q. Procedures for ensuring that the larry car hoppers are filled properly with coal	charging				
r. Procedures for the alignment of the larry car over the oven to be charged	charging				
s. Procedures for filling the oven (e.g., procedures for staged or sequential charging)	charging				
t. Procedures for ensuring that the coal is leveled properly in the oven	charging				
u. PROven Control Technology https://www.dmt-group.com/products/coking-technology/provenr-system.html#:~:text=The%20PROven%C2%AE%20system%2C%20invented,collecting%20main%20under%20negative%20pressure .	Charging (etc.)				
v. Gas-tight connections between the coke oven and the charging car (by-product coke) . Use of steam or water injection in the gooseneck of the ascension pipe.	charging				
w. Charging with telescope sleeves (‘Japanese charging’) (simultaneous charging many charging ports via enclosed ‘telescope sleeves’ from which the gases are extracted and sent to control devices).	charging				
x. Sequential/stage charging, which involves charging one port at a time; with the resulting induced suction,	charging				
y. Work practices not included above	doors				
z. Work practices not included above	lids				

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Work practice / Equipment / Other Measure Description	Indicate if for doors, lids, offtakes, or charging	Indicate if currently using, tried in past, or considered in past	Use Cost Table in Appendix D to Provide Costs and Add Here	Describe how well it works/ worked	Describe why not using anymore
aa. Work practices not included above	offtakes				
ab. Work practices not included above	charging				

6. Please provide the **plan** required by the Coke Oven Battery NESHAP, part 63, subpart L, at § 63.306, which is as follows:

§ 63.306 *Work practice standards* (a) **Work practice plan**. On or before November 15, 1993, each owner or operator shall prepare and submit a written emission control work practice plan for each coke oven battery. The plan shall be designed to achieve compliance with visible emission limitations for coke oven doors, topside port lids, offtake systems, and charging operations under this subpart, or, for a coke oven battery not subject to visible emission limitations under this subpart, other federally enforceable visible emission limitations for these emission points.

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PART D. COKE BY-PRODUCT BATTERY STACK OPACITY DATA

1. Please provide the previous 5 years of hourly continuous opacity monitoring (COMS) data from all battery stacks in CSV format (name file using a similar naming convention as: ***"FacilityID_BatteryID_Coke_Enc1_COMS_Hourly_5-years.csv"***, that includes battery ID, time, hourly opacity recorded, and a description of the instrument tags. **Separate periods of extended coking from normal coking by including in separate files.**

2. Please provide 1-min continuous opacity monitoring (COMS) data from all battery stacks in CSV format (name file using a similar naming convention as: ***"FacilityID_BatteryID_Coke_Enc1_COMS_Minute_2-weeks.csv"*** for a two-week period that includes battery ID, time, recorded opacity, and a description of the instrument tags. For the same period, provide, using the provided template "Coke_Enc1_Operations_COMS_Minute_2-weeks.csv", corresponding times of oven charging and pushing for each battery, including details of the type of coking taking place in each oven.

3. Please provide a reference to each state or local (S/L) rule that applies to battery stack continuous opacity monitoring (COMs) and describe procedures and practices that are used to comply with each S/L rule. Include any written SOPs or procedures.

State/local Rule Citation for COMS	Summary of COMS S/L requirements	Summary of any S/L stipulated consequences for noncompliance	Summary of S/L COMS practices to comply	Filename of any written S/L COMS plan

4. Provide a description of the work practices, including oven and battery investigations, assessments, and/or O&M practices, that are undertaken when triggered by high battery stack opacity, i.e., greater than the limit in the rule. Work practices also can be triggered by an SOP or O&M plan, including federal, state, local, or facility SOPs. Describe how these work practices fit into any larger oven and/or battery O&M plan. Provide any written SOPs or plans and include the filename in the table.

Name and section of Work Practice SOP, O&M program/protocol that is triggered by high battery stack opacity	Cite rule requiring SOP, O&M Plan, or protocol for opacity exceedances	Filename of SOP, O&M plan, or protocol (leave blank if none)	Opacity (%) that triggers SOP / O&M practices	Opacity averaging time of trigger (minutes)	Description of work practices, control devices, etc., required by SOP/O&M/protocol program

5. For the past 3 years (or last 10 occurrences, whichever is less), list and describe the oven and battery O&M work practices that were implemented in response to high battery stack opacity levels.

Date of high opacity (and initiation of work practice, SOP, or protocol if different)	Filename of SOP, O&M Plan, or other written protocol and citation for applicable requirement (leave blank if none)	Opacity that triggered the action (%)	Opacity averaging time of trigger (minutes)	Description of work practices initiated	Date of completion of remedial actions

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PART E. MISCELLANEOUS: EMERGENCY FLARES; COMMUNITY ISSUES; PRA

1. Emergency Battery Flares

- How many flares are on each battery? At entire coke manufacturing plant?
- Do the battery flares have a continuously lit pilot flame or do the flares use an electronic igniter?
- If an igniter is used, what are the measures taken to ensure the ignitor works whenever needed?
- For flares with ignitors, how many igniter plugs are used and how many igniter transformers?
- What is the maximum permitted gas velocity for each flare?
- What is the waste gas net heating value? (BTU)
- What is the approximate amount of time each flare is used on a daily/weekly/annual basis?
- Please provide the results of visible emission tests for each flare for the past full year.
- List all flare citations/NOV issued by state/local/EPA inspectors in last year.

2. Community issues in past 5 years?

Please use the table below to list any issues with community via direct complaints, news stories, or otherwise about your coke manufacturing facility in the last 5 years.

When (MM/DD/YYYY) were the complaints received?	What did the complaints concern?	Who were the complaints from, if know?	How was each compliant/issue resolved?	When (MM/DD/YYYY) was each complaint/issue resolved? If not resolved, put "ongoing".

Note: If the complaint was resolved in a consent decree listed in Part B above, please note in column 4 in this table.

3. Review of part 61 subpart L burden ICR supporting statement for NESHAP for Coke By-Product Recovery Plants.

Please review the latest version of the supporting statement developed to fulfill the Paperwork Recovery Act (PRA) requirements for the NESHAP for Coke By-Product Recovery Plants. Under the PRA, the EPA

tracks the time facilities spend attending to paperwork required by EPA rules.* The EPA updates the PRA estimates periodically. The latest (renewal concluded 02/23/2022) estimate for the paperwork requirements for 40 CFR, part 61, subpart L is provided with your answer file as an Excel® spreadsheet. Use the answer columns provided in the spreadsheet for your estimates, if different than the EPA estimate.

*PRA: *In general, EPA standards typically require initial notifications, performance test reports, monitoring, and periodic reports by the owners/operators of the affected facilities. These notifications, reports, and records are essential in determining compliance, and are required of all affected facilities subject to EPA rules. The facility must establish and maintain records; make reports; install, use, and maintain monitoring equipment; use audit procedures; sample emissions in accordance with procedures or methods, at locations, intervals, and periods in the manner as the Administrator prescribes; and keep records on control equipment parameters, production variables or other indirect data when direct monitoring of emissions is impractical; submit compliance certifications in accordance with the rule requirements; and provide such other information as the Administrator may reasonably require. The owner/operator must maintain a file containing these documents and retain the file for at least five years following the generation date of such reports and records.*

Appendix A

Acronyms

acfm	actual cubic feet per minute
atm	atmospheres (unit of pressure)
Btu/hr	British thermal units per hour
Btu/scf	British thermal units per standard cubic foot
BTX	benzene, toluene, xylene
CAA	Clean Air Act
COG	coke oven gas
CBI	confidential business information
CBRP	coke by-product recovery plant
day/yr	days per year
°C	degrees Celsius
°F	degrees Fahrenheit
EPA	U.S. Environmental Protection Agency
ft	foot or feet
ft^2	square feet
ft^3	cubic feet
fpm	feet per minute (acfm divided by ft^2 of filter area)
fps	feet per second
gal	gallon
g	gram
HAP	hazardous air pollutants
hr	hour or hours
hr/day	hours per day
in	inch or inches
lbs	pounds
LDAR	leak detection and repair
m	meter
MACT	maximum achievable control technology
min	minute or minutes
MM btu/hr	millions of British thermal units per hour
MM scf	millions of standard cubic feet
NAICS	North American Industry Classification System
NESHAP	National Emission Standards for Hazardous Air Pollutants
O&M	operating and maintenance
OAQPS	Office of Air Quality Planning and Standards
PM	filterable particulate matter
psia	pounds per square inch absolute
%	percent
s	second or seconds
SCC	source classification codes
scf	standard cubic feet
scf/hr	standard cubic feet per hour
SOP	standard operating procedures

SOPL	standard operating plan
S/L	state or local
SPPD	Sector Policies and Programs Division
TDS	total dissolved solids
tpd	tons (short) per day
tph	tons (short) per hour
tpm	tons (short) per month
tpy	tons (short) per year
UOM	units of measurement, (e.g., tons, gallons, ft^3, etc.)
yr	year

Appendix B

Individual Air Pollutants/Parameters (and CAS No., where available)

Carbon Dioxide (124-38-9)
Carbon Monoxide (630-08-0)
Hydrogen Chloride (7647010)
Hydrogen Cyanide (74908)
Hydrogen Fluoride (7664393)
Opacity
Oxygen (7782-44-7)
Particulate Matter, filterable
Particulate Matter$_{2.5}$, condensable
Particulate Matter$_{2.5}$, filterable
Sulfur Dioxide (7446-09-5)
Toluene-Soluble Organics
Visible Emissions (leaks)

HAP Metals (and CAS No.'s)

Antimony (7440-36-0)
Arsenic (7440-38-2)
Beryllium (7440-41-7)
Cadmium (7440-43-9)
Chromium, Total (7440-47-3)
Cobalt (7440-48-4)
Lead (7439-92-1)
Manganese (7439-96-5)
Mercury (7439-97-6)
Nickel (7440-02-0)
Selenium (7782-49-2)

Semi-volatile HAP (PAH) and CAS No.'s

Acenaphthene (83-32-9)
Acenaphthylene (208-96-8)
Anthracene (120-12-7)
Benz[a]anthracene (56-55-3)
Benzo[a]pyrene (50-32-8)
Benzo[b]fluoranthene (205-99-2)
Benzo[g,h,i]perylene (191-24-2)
Benzo[k]fluoranthene (207-08-9)
Chrysene (218-01-9)
Dibenz[a,h]anthracene (53-70-3)
Fluoranthene (206-44-0)

Fluorene (86-73-7)
Indeno (1,2,3-cd) pyrene (193-39-5)
Naphthalene (91-20-3)
Phenanthrene (85-01-8)
Perylene (198-55-0)
Pyrene (129-00-0)

Dioxins/Furans as 2,3,7,8-TCDD TEQs and CAS No.'s

1,2,3,4,6,7,8-Heptachlorodibenzofuran (67562394)
1,2,3,4,6,7,8-Heptachlorodibenzo-p-Dioxin (35822469)
1,2,3,4,7,8,9-Heptachlorodibenzofuran (55673897)
1,2,3,4,7,8-Hexachlorodibenzofuran (70648269)
1,2,3,4,7,8-Hexachlorodibenzo-p-Dioxin (39227286)
1,2,3,6,7,8-Hexachlorodibenzofuran (57117449)
1,2,3,6,7,8-Hexachlorodibenzo-p-Dioxin (57653857)
1,2,3,7,8,9-Hexachlorodibenzofuran (72918219)
1,2,3,7,8,9-Hexachlorodibenzo-p-Dioxin (19408743)
2,3,4,6,7,8-Hexachlorodibenzofuran (60851345)
Octachlorodibenzo-p-Dioxin (3268879)
1,2,3,7,8-Pentachlorodibenzofuran (57117416)
1,2,3,7,8-Pentachlorodibenzo-p-Dioxin (40321764)
2,3,4,7,8-Pentachlorodibenzofuran (57117314)
2,3,7,8-Tetrachlorodibenzofuran (51207319)
2,3,7,8-Tetrachlorodibenzo-p-Dioxin (1746016)
Octachlorodibenzofuran (39001020)

Speciated Volatile Organic HAP (VOHAP)

Formaldehyde (50-00-0)
Acrylonitrile (107-13-1)
Benzene (71-43-2)
Bromoform[b] (75-25-2)
Bromomethane[a] (74-83-9)
Carbon disulfide (75-15-0)
Carbon tetrachloride (56-23-5)
Chlorobenzene (108-90-7)
Chloroethane[a] (75-00-3)
Chloroform (67-66-3)
Chloromethane[a] (74-87-3)
1,2-Dichloroethane (107-06-2)
1,1-Dichloroethene (75-35-4)
1,2-Dichloropropane (78-87-5)
Ethylbenzene[b] (100-41-4)
Iodomethane (74-88-4)

Methylene chloride (75-09-2)
Styrene[b] (100-42-5)
1,1,2,2-Tetrachloroethane[b] (79-34-5)
Tetrachloroethene (127-18-4)
Toluene (108-88-3)
1,1,1-Trichloroethane (71-55-6)
1,1,2-Trichloroethane (79-00-5)
Trichloroethene (79-01-6)
Vinyl chloride[a] (75-01-4)
Xylenes[b] (1330-20-7)

[a] Boiling point of this compound is below 30˚C

[b] Boiling point of this compound is above 120˚C

COKE OVENS SECTION 114 REQUEST – ENCLOSURE 1
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Appendix C

SCC List

https://sor-scc-api.epa.gov/sccwebservices/sccsearch/

SCC	SCC level one	SCC level two	SCC level three	SCC level four
30300361	Industrial Processes	Primary Metal Production	Metallurgical Coke Manufacturing	By-product Process: Chemical Plant: Equipment Leaks
30300333	Industrial Processes	Primary Metal Production	Metallurgical Coke Manufacturing	By-product Process: Chemical Plant: Excess Ammonia Liquor Tank
30300332	Industrial Processes	Primary Metal Production	Metallurgical Coke Manufacturing	By-product Process: Chemical Plant: Flushing-liquor Circulation Tank
30300342	Industrial Processes	Primary Metal Production	Metallurgical Coke Manufacturing	By-product Process: Chemical Plant: Light Oil Decanter/Condenser Vent
30300341	Industrial Processes	Primary Metal Production	Metallurgical Coke Manufacturing	By-product Process: Chemical Plant: Light Oil Sump
30300354	Industrial Processes	Primary Metal Production	Metallurgical Coke Manufacturing	By-product Process: Chemical Plant: Other Processes
30300352	Industrial Processes	Primary Metal Production	Metallurgical Coke Manufacturing	By-product Process: Chemical Plant: Tar Bottom Final Cooler
30300334	Industrial Processes	Primary Metal Production	Metallurgical Coke Manufacturing	By-product Process: Chemical Plant: Tar Dehydrator
30300335	Industrial Processes	Primary Metal Production	Metallurgical Coke Manufacturing	By-product Process: Chemical Plant: Tar Interceding Sump
30300336	Industrial Processes	Primary Metal Production	Metallurgical Coke Manufacturing	By-product Process: Chemical Plant: Tar Storage
30300344	Industrial Processes	Primary Metal Production	Metallurgical Coke Manufacturing	By-product Process: Chemical Plant: Wash Oil Circulation Tank
30300343	Industrial Processes	Primary Metal Production	Metallurgical Coke Manufacturing	By-product Process: Chemical Plant: Wash Oil Decanter
suggested				
suggested				
suggested				
suggested				
suggested				
suggested				

COKE OVENS SECTION 114 REQUEST – ENCLOSURE 1
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Appendix D

Example Cost Table

Emission Source (specify)	Describe Measure (Work Practice/ Equipment /Other)	Capital Purchases and Year$	Annual O&M Expenses and Year$	Labor (hrs/day)	Labor (hrs/week)	Labor (hrs/yr)	Type of Labor (e.g., (technician, skilled worker, manager, etc.)	Estimated Control Efficiency (%) of Work Practice or Equipment	Other Notes